

## EAST Search History

S12 0	2	("4599569").PN. OR ("5926334"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/06/26 16:06
S12 1	5	"5293278"	US-PGPUB; USPAT; USOCR	OR	ON	2006/06/26 16:06
S12 2	3	"5253299".uref.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/06/26 16:08
S12 3	74	((381/106-109).ccls.) and (noise adj reduction) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/06/26 16:09
S12 4	19	"4901150"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/07/05 11:06
S12 5	16	("4044381"   "4167755"   "4504864"   "4554514"   "4698680").PN. OR ("4901150").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/05 10:47
S12 6	1870	358/167	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/07/05 11:06
S12 7	41	((381/94.8).ccls.) and @ay<="1997"	USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:47
S12 8	24068	high adj pass adj filter\$1	USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:46
S12 9	30603	high adj pass adj filter\$1	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:57
S13 0	22	((381/94.2).ccls.) and S129 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:01
S13 1	6	((381/94.7).ccls.) and S129 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:51
S13 2	27	((381/94.3).ccls.) and S129 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:53

## EAST Search History

S13 3	88	((381/94.1-94.9).ccls.) and S129 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:57
S13 4	33112	high adj pass adj filter\$1 or (HPF)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:57
S13 5	91	((381/94.1-94.9).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:16
S13 6	74	((381/94.2).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:02
S13 7	73	((381/94.7).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:04
S13 8	461	((381/94.3).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:04
S13 9	0	((358/167).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:15
S14 0	0	((358/167).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:15
S14 1	0	((358/36).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:15
S14 2	48	((381/61).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:17
S14 3	109	((381/98).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:19
S14 4	28	((381/101-102).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:20

## EAST Search History

S14 5	118	((381/106-109).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:23
S14 6	44	((381/56-57).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:24
S14 7	24	((381/120).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:25
S14 8	8	((381/73.1).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:27
S14 9	17	((381/104).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 13:49
S15 0	0	((381/94).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:49
S15 1	15	((348/618).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:50
S15 2	22	((348/622).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:51
S15 3	5	((348/683).ccls.) and S134 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 12:51
S15 4	33112	high adj pass adj filter\$1 or (HPF)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 13:50
S15 5	5	((381/71.1).ccls.) and S154 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 13:50

## EAST Search History

S10 6	68	"4185168"	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/28 10:16
S10 7	60	("3803357"   "4025721").PN. OR ("4185168").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/28 10:35
S10 8	13080	noise adj reduction	USPAT	OR	ON	2006/01/25 10:56
S10 9	19777	noise adj reduction	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/25 10:56
S11 0	831	detect\$4 same noise adj level same compar\$4 same threshold	US-PGPUB; USPAT; USOCR	OR	ON	2006/06/26 15:36
S11 1	22	S109 and S110 and @ay<="1997"	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/25 10:59
S11 2	1	("4901150").PN.	USPAT; USOCR	OR	OFF	2006/01/26 09:00
S11 3	974	detect\$4 same noise adj level same compar\$4 same threshold	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/06/26 15:36
S11 4	30499	high adj pass adj filter	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/06/26 15:37
S11 5	36	S113 and S114 and "1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/06/26 15:38
S11 6	41	((381/94.8).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/06/26 15:57
S11 7	19	"4901150"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/06/26 15:57
S11 8	16	("4044381"   "4167755"   "4504864"   "4554514"   "4698680").PN. OR ("4901150").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/06/26 16:05
S11 9	2	"5926334"	US-PGPUB; USPAT; USOCR	OR	ON	2006/06/26 16:05

## EAST Search History

S80	0	"6556685".uref.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:45
S81	1	"6556685"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:46
S82	9	("3789143"   "3795876"   "3903485"   "4101849"   "4103239"   "4169219"   "4224581"   "4250470"   "4490691"). PN. OR ("6556685").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/12/27 14:46
S83	40677	noise adj reduc\$4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:57
S84	441	S73 and S83 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:58
S85	0	S73 and S78 and S83 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:58
S86	82	S73 and S76 and S83 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:58
S87	97	((381/102).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 16:46
S88	331	((381/104).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 16:47
S89	10	((381/104).ccls.) and (noise adj reduction) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 17:00
S90	4	((381/104).ccls.) and ( reduce\$1 adj noise) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 17:00
S91	42	((381/106-109).ccls.) and ( reduce\$1 adj noise) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 16:55

## EAST Search History

S68	41	((381/94.8).cccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 11:44
S69	135	(noise adj reduc\$4) same detect\$4 same (gain adj control\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 11:46
S70	77	(noise adj reduc\$4) same detect\$4 same (gain adj control\$4) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 11:46
S71	126	((381/94.1).cccls.) and @ay<="1997"	USPAT; EPO	OR	OFF	2005/12/27 12:25
S72	126	((381/94.1).cccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 14:21
S73	46582	(audio same automatic adj gain adj control\$4) or agc	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 13:40
S74	740	detect\$4 adj noise adj level	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:56
S75	41	S73 and S74 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:18
S76	41669	(adjust\$4 or reduce\$2) and noise adj level	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:19
S77	860	S73 and S76 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:20
S78	451	(adjust\$4 or reduce\$2) adj device and noise adj level	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:19
S79	8	S73 and S78 and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 14:57

## EAST Search History

S51	3	"5253299"	USPAT	OR	ON	2005/05/02 15:18
S52	11	("3673342"   "3803357"   "3857104"   "3943293"   "4208547"   "4301541"   "4577226"   "4630305"   "4680793"   "4771464"   "4833715").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/05/02 15:20
S53	16	("4833715").URPN.	USPAT	OR	ON	2005/05/02 15:26
S54	792	(restor\$6 same level) and (audio or sound) and (noise and attenuat\$5)	USPAT; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/05/02 16:41
S55	407	(restor\$6 same level) and (audio or sound) and (noise and attenuat\$5) and @ay<="1997"	USPAT; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/05/02 16:32
S56	0	(restor\$6 adj level) same (audio or sound) same (noise adj attenuat\$5) and @ay<="1997"	USPAT; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/05/02 16:36
S57	16509	restor\$6 same level and @ay<="1997"	USPAT; USOCR; EPO	OR	OFF	2005/05/02 16:35
S58	2	(restor\$6 adj level) same (audio or sound) same noise and @ay<="1997"	USPAT; USOCR; EPO; DERWENT; IBM_TDB	OR	OFF	2005/05/02 16:36
S59	2	(restor\$6 same level) and (audio or sound) and (noise and attenuat\$5)	IBM_TDB	OR	OFF	2005/05/02 16:55
S60	45	"3681618"	US-PGPUB; USPAT; USOCR	OR	OFF	2005/05/02 16:55
S61	1	("3681618").PN.	USPAT; USOCR	OR	OFF	2005/05/03 10:24
S62	0	("gainadjcontrol\$4").PN.	IBM_TDB	OR	OFF	2005/05/03 10:25
S63	314	gain adj control\$4	IBM_TDB	OR	ON	2005/05/03 10:25
S64	110	automatic adj gain adj control\$4	IBM_TDB	OR	ON	2005/05/03 10:30
S65	0	broadcasting adj automatic adj gain adj control\$4	IBM_TDB	OR	ON	2005/05/03 10:27
S66	8	audio same automatic adj gain adj control\$4	IBM_TDB	OR	ON	2005/12/27 13:39
S67	44	((381/94.8).ccls.) and @ay<="1998"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2005/12/27 10:59

## EAST Search History

S1	50	((("6211984") or ("6211984") or ("6148116") or ("4860366") or ("4956644") or ("5185806") or ("5268685") or ("5796850") or ("4926261") or ("5204906") or ("5212764") or ("5307516") or ("5410606") or ("H001526") or ("5536903") or ("5715015") or ("5977899") or ("6008670") or ("4275411") or ("4302768") or ("4309649") or ("4380080") or ("4460924") or ("4574390") or ("4602217") or ("4772939") or ("4899150") or ("4918339") or ("4926361") or ("4937576") or ("5228088") or ("5239578") or ("5249064") or ("5257109") or ("5260775") or ("5260792") or ("5285277") or ("5307379") or ("5400149") or ("5416641") or ("5446539") or ("5457500") or ("5467145") or ("5606375") or ("5659313") or ("5663914") or ("5687285") or ("5757299") or ("5793417") or ("5812495")).PN.	USPAT; USOCR; EPO	OR	OFF	2005/05/02 13:23
S2	0	"5926334".uref.	USPAT; EPO	OR	OFF	2002/08/30 13:29
S3	50	"4185168".uref.	USPAT; EPO	OR	OFF	2002/08/30 13:40
S4	2	"5253299".uref.	USPAT; EPO	OR	OFF	2006/06/26 16:08
S5	1	"5253299".pn. and (dynamic expander circuit)	USPAT; EPO	OR	OFF	2002/08/30 13:43
S6	1	"5253299".pn. and (dynamic adj expander adj circuit)	USPAT; EPO	OR	OFF	2002/08/30 13:43
S7	0	"5926334".uref.	USPAT; EPO	OR	OFF	2002/08/31 10:26
S8	5	"4599569"	USPAT; EPO	OR	OFF	2002/08/31 10:29
S9	64	"4025721"	USPAT; EPO	OR	OFF	2002/08/31 10:29
S10	377	((381/94.1)".ccls")	USPAT; EPO	OR	OFF	2006/06/26 15:44
S11	19541	restor\$6 same level	USPAT; EPO	OR	OFF	2005/05/02 16:35
S12	212862	audio or sound	USPAT; EPO	OR	OFF	2003/03/24 13:55
S13	1	attenust\$5	USPAT; EPO	OR	OFF	2003/03/24 13:56



## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
		(restor\$6 same level) and (audio or sound)	USPAT; EPO	OR	OFF	2003/03/24 14:58
		(noise adj reduc\$4) same detect\$4 same (gain adj control\$7)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2005/12/27 11:46
		(noise adj reduc\$4) same detect\$4 same (gain adj control\$7)	USPAT; USOCR	OR	ON	2006/01/26 09:00
L2	24	("3673342"   "3803357"   "3857104"   "3943293"   "4208547"   "4301541"   "4680793"   "4771464"   "4833715"). PN. OR ("5067157").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/06 13:55
L3	73	((381/94.7).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 14:23
L4	461	((381/94.3).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 14:23
L5	74	((381/94.2).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 14:24
L6	41	((381/94.8).ccls.) and @ay<="1997"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	OFF	2006/07/06 14:24